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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/921,355	08/02/2001	Shaotian Wang	88-1008B	6027

24114 7590 02/09/2004  
LYONDELL CHEMICAL COMPANY  
3801 WEST CHESTER PIKE  
NEWTOWN SQUARE, PA 19073

EXAMINER

PASTERCZYK, JAMES W

ART UNIT	PAPER NUMBER
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1755

DATE MAILED: 02/09/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/921,355

Applicant(s)

WANG, SHAOTIAN

Examiner

J. Pasterczyk

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 21 November 2003 and 20 January 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 36,38-45 and 47-57 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 36,38-45 and 47-57 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
- 1) ☐ Certified copies of the priority documents have been received.
  - 2) ☒ Certified copies of the priority documents have been received in Application No. 09/318,009.
  - 3) ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 8/2/01.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

1. This Office action is in response to the amendments filed 1/20/04 and 11/21/03 and the terminal disclaimer filed 11/21/03 and refers to the first Office action mailed 8/19/03.

2. The terminal disclaimer filed on 11/21/03 disclaiming the terminal portion of any patent granted on this application which would extend beyond the expiration date of USP 6,291,386 has been reviewed and is accepted. The terminal disclaimer has been recorded.

3. The objections to the specification and rejections for formal reasons against the claims are withdrawn due to amendment. The Hasegawa and Hlatky references are withdrawn as good prior art against the present claims due to persuasive argument. However, see below for maintained rejections.

4. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

5. Claims 36, 38-45 and 47-57 are rejected under 35 U.S.C. 103(a) as being unpatentable over Ewen in view of either of Tomotsu or Turner as cited in and for the reasons of record given in the previous Office action.

6. Claim 42 is rejected under 35 U.S.C. 103(a) as being unpatentable over Ewen, Tomotsu and Turner as applied to claims 36, 38-41, 43-45 and 47-57 above, and further in view of Etherton as cited in and for the reasons of record given in the previous Office action.

7. Applicant's arguments filed 1/20/04 and 11/21/03 have been fully considered but they are not persuasive.

In response to applicant's argument that the inventive method of making the catalyst results in a catalyst which is more stable, the fact that applicant has recognized another advantage which would flow naturally from following the suggestion of the prior art cannot be

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the basis for patentability when the differences would otherwise be obvious. See *Ex parte Obiaya*, 227 USPQ 58, 60 (Bd. Pat. App. & Inter. 1985).

Regarding this recognition of the increased stability of the catalyst made by the presently-claimed method, Ewen appears to recognize this in col. 2, l. 38-40 where it states that its objective is to improve catalyst activity by adding an aluminum alkyl compound to the catalyst composition in order to serve as a scavenging agent which would react with impurities which would otherwise poison the active catalyst. There appears to be no difference between Ewen's "poisoning" of the catalyst and the present inventor's "instability problems". In addition, claim 1 of Ewen appears to read on all the method steps with the sole distinction being the substitution of hydrocarbyl ligands for halogen ligands on the metallocene, a substitution the two teaching references show would have been conventional to one of ordinary skill in the art at the time the invention was made. Finally, one of ordinary skill in the art would have recognized that combining an aluminum alkyl or any other alkylating agent with a metal halide would have resulted in alkylation of the metal with formation of aluminum halide.

**8. THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event,

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however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to J. Pasterczyk whose telephone number is 571-272-1375. The examiner can normally be reached on M-F from 9 to 5:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mark Bell, can be reached at 571-272-1362. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).



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2/2/04